WHAT IS CLAIMED IS:

1. A locking connector for electrically interconnecting two or more electrical conductors comprising:

an electrical contact component electrically interengaged with a first conductor, said contact component including a contact section, and an opening that receives a second conductor; and

a set of at least two spring locking clips that are generally serially arranged to face away from said opening such that said clips are sequentially and resiliently opened by introducing the second conductor through said opening, said clips being spring biased to grip the second conductor at a plurality of locations and hold the second conductor in electrical interengagement with said contact section, while resisting disengagement of the second conductor from said contact section.

2. The connector of claim 1 further including release holes formed through said contact section for receiving a spring release element to urge said clips into an open condition such that the second conductor may be selectively inserted into and removed from said opening in said electrical contact component.

3. A locking connector for electrically interconnecting first and second electrical conductors, said connector comprising:

an electrical contact component electrically interengaged with the first conductor, said contact component including first and second spaced apart contact sections and an intermediate section that interconnects said spaced apart sections, said intermediate section including an opening that receives the second conductor; and

a set of at least two spring locking clips that are mounted to said first conductor section and generally serially arranged to face away from said opening such that said clips are sequentially and resiliently opened by introducing the second conductor through said opening, said clips being spring biased to grip the second conductor at a plurality of

locations and hold the second conductor in electrical interengagement with said second contact section, while resisting disengagement of the second conductor from said second contact section.

4. The connector of claim 3 in which said contact component includes a unitary, conductive element.

5. The connector of claim 3 in which said first and second contact sections comprise a generally parallel pair of plates.

6. The connector of claim 5 in which said spring clips are secured to a first said plate and are spring biased to urge the second conductor against the other, second said plate.

7. The connector of claim 6 in which at least one of said spring clips comprises a leaf spring.

8. The connector of claim 7 in which each said clip includes a first generally planar segment that engages and is connected to said first plate, a second segment that is connected to said first segment at an angle, and unitary spring means for urging said second segment apart from said first segment and into gripping interengagement with the second conductor.

9. The connector of claim 8 in which said first plate carries a pair of generally parallel lips that extend transversely therefrom, said first segment of one of said clips being interconnected between said intermediate contact section wall and one of said lips, and said first segment of the other said clip being interconnected between said pair of lips.

10. The connector of claim 6 further including a distal lip that extends transversely from said second plate for limiting the extent to which the second conductor may be introduced through said opening.

11. The connector of claim 6 in which said second plate includes guide means for locating the second conductor relative to said second plate.

12. The connector of claim 11 in which said guide means comprise an elongate rib formed in said second plate.

13. The connector of claim 3 further including release holes formed through said second contact section for receiving a spring release element to urge said second segments of said clips into an open condition wherein said second segments are disengaged from the second conductor such that the second conductor may be selectively engaged with and disengaged from said contact component.

14. The connector of claim 3 further including an enclosure that accommodates said contact component, said enclosure having an inlet aligned with said opening for receiving the second conductor.

15. The connector of claim 14 in which said enclosure includes a unitary component.

16. A locking connector for electrically interconnecting a plurality of standard electrical conductors, said connector comprising:

an electrical contact component including first and second spaced apart conductor sections and an intermediate section that interconnects said first and second sections, said intermediate section including multiple openings that selectively receive respective conductors; and

multiple sets of spring locking clips, each said set comprising at least two spring locking clips mounted to said first contact section and generally serially arranged to face away from an associated one of said inlets such that said clips in said set are sequentially and resiliently opened by introducing an associated conductor through an associated opening, said clips being spring biased to grip the associated conductor at a plurality of locations and hold the conductor in electrical interengagement with said contact component, whereby said clips resist disengagement of the conductor from said contact component.

17. A locking connector for electrical interconnecting first and second electrical conductors, said connector comprising:

an enclosure that accommodates an electrical contact component, which component is electrically interengaged with the first

conductor, said enclosure including an inlet through which the second conductor is selectively inserted to engage said electrical contact component; and

a set of at least two spring locking clips mounted in said enclosure and generally serially arranged to face away from said inlet such that said clips are sequentially and resiliently opened by introducing the second conductor through said inlet, said clips being spring biased to grip the second conductor at a plurality of locations and hold the second conductor in electrical interengagement with said contact component, whereby said clips resist disengagement of the second conductor from said contact component.

18. A locking connector for electrically interconnecting two or more electrical conductors comprising:

an electrical contact component having opposite ends each containing one or more openings for receiving respective electrical conductors; and

at least one spring locking clip arranged to face away from each said opening such that said clip associated with each said opening is resiliently opened by introducing the respective electrical conductors through said openings, each said clip being spring biased to grip the respective electrical conductors and hold the respective electrical conductors in electrical interengagement with said contact section, while resisting disengagement of the respective electrical conductors from said contact section.

19. The connector of claim 18 wherein there are at least two spring clips generally serially arranged to face away from each said opening such that said clips are sequentially and resiliently opened by introducing the respective electrical conductors through said openings, said clips being spring biased to grip the respective electrical conductors at a plurality of locations and hold the respective electrical conductors in electrical

interengagement with said contact section, while resisting disengagement of the respective electrical conductors from said contact section.

20. The connector of claim 18 including release holes formed through said contact section for receiving a spring release element to urge each said clip into an open condition such that the respective electrical conductors may be selectively inserted into and removed from said openings in said electrical contact component.

21. A locking connector for electrically interconnecting two or more electrical conductors comprising:

an electrical contact component electrically interengaged with a first conductor, said contact component including a contact section and an opening that receives a second conductor:

at least one spring locking clip arranged to face away from said opening such that said clip is resiliently opened by introducing a second conductor through said opening, said clip being spring biased to grip the second conductor and hold the second conductor in electrical interengagement with said contact section, while resisting disengagement of the second conductor from said contact section; and

a release hole formed through said contact section for receiving a spring release element to urge said clip into an open condition such that the second conductor may be selectively inserted into and removed from said opening in said electrical contact component.

22. An enclosure for an electrical connector comprising:

a generally rectilinear component having an interior space that accommodates an electrical contact; said generally rectilinear component including a front surface that includes at least one inlet for selectively receiving an electrical conductor to interengage said contact, said component including an opening that receives a second conductor, which electrically interengages said contact;

a rib that peripherally surrounds said rectilinear component and extends transversely to said front surface; and

said generally rectilinear component including at least one surface that has a recess formed therein which facilitates a user's grip.

add A7

add B1

add C1